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| APPLICATION NO.                                                          | FILING DATE   | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--------------------------------------------------------------------------|---------------|-----------------------|-------------------------|------------------|
| 10/711,112                                                               | 08/24/2004    | J. Andrew Galloway    | PU2000                  | 5111             |
| 23454 75                                                                 | 90 09/25/2006 |                       | EXAMINER                |                  |
| CALLAWAY GOLF COMPANY<br>2180 RUTHERFORD ROAD<br>CARLSBAD, CA 92008-7328 |               | PASSANITI, SEBASTIANO |                         |                  |
|                                                                          |               |                       | ART UNIT                | PAPER NUMBER     |
|                                                                          |               |                       | 3711                    | *** ***          |
|                                                                          |               |                       | DATE MAILED: 09/25/2006 | 6                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Application No.                                                                                                        | Applicant(s)                                                                            | - |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 10/711,112                                                                                                             | GALLOWAY, J. ANDREW                                                                     |   |  |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Examiner                                                                                                               | Art Unit                                                                                |   |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Sebastiano Passaniti                                                                                                   | 3711                                                                                    |   |  |  |  |
| The MAILING DATE of this communication                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                        |                                                                                         | - |  |  |  |
| Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                        | •                                                                                       |   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR R WHICHEVER IS LONGER, FROM THE MAILIN  - Extensions of time may be available under the provisions of 37 CI after SIX (6) MONTHS from the mailing date of this communicatio  - If NO period for reply is specified above, the maximum statutory p  - Failure to reply within the set or extended period for reply will, by a Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). | G DATE OF THIS COMMUNICATION FR 1.136(a). In no event, however, may a reply be not | ON.  It imely filed  om the mailing date of this communication.  NED (35 U.S.C. § 133). |   |  |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                        |                                                                                         |   |  |  |  |
| 1) Responsive to communication(s) filed on                                                                                                                                                                                                                                                                                                                                                                                                                                           | see détailed Office action                                                                                             |                                                                                         |   |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | This action is non-final.                                                                                              |                                                                                         |   |  |  |  |
| 3) Since this application is in condition for all                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                        | prosecution as to the merits is                                                         |   |  |  |  |
| closed in accordance with the practice une                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                        | · · · · · · · · · · · · · · · · · · ·                                                   |   |  |  |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                | , , , , , , , , , , , , , , , , , , ,                                                                                  |                                                                                         |   |  |  |  |
| ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A                                                                                                                      |                                                                                         |   |  |  |  |
| 4) Claim(s) <u>1-18</u> is/are pending in the applica                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                        |                                                                                         |   |  |  |  |
| 4a) Of the above claim(s) <u>18</u> is/are withdra                                                                                                                                                                                                                                                                                                                                                                                                                                   | with from consideration.                                                                                               |                                                                                         |   |  |  |  |
| · · · · · · · · · · · · · · · · · · ·                                                                                                                                                                                                                                                                                                                                                                                                                                                | Claim(s) is/are allowed.                                                                                               |                                                                                         |   |  |  |  |
| 6)⊠ Claim(s) <u>1-17</u> is/are rejected.<br>7)□ Claim(s) is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                        |                                                                                         |   |  |  |  |
| · <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | mal/an alaatian naarrinamant                                                                                           |                                                                                         |   |  |  |  |
| 8) Claim(s) are subject to restriction a                                                                                                                                                                                                                                                                                                                                                                                                                                             | na/or election requirement.                                                                                            |                                                                                         |   |  |  |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                        |                                                                                         |   |  |  |  |
| 9) ☐ The specification is objected to by the Exa                                                                                                                                                                                                                                                                                                                                                                                                                                     | miner.                                                                                                                 |                                                                                         |   |  |  |  |
| 10) The drawing(s) filed on is/are: a) □                                                                                                                                                                                                                                                                                                                                                                                                                                             | accepted or b)  objected to by th                                                                                      | e Examiner.                                                                             |   |  |  |  |
| Applicant may not request that any objection to                                                                                                                                                                                                                                                                                                                                                                                                                                      | the drawing(s) be held in abeyance.                                                                                    | See 37 CFR 1.85(a).                                                                     |   |  |  |  |
| Replacement drawing sheet(s) including the co                                                                                                                                                                                                                                                                                                                                                                                                                                        | prrection is required if the drawing(s) is                                                                             | objected to. See 37 CFR 1.121(d).                                                       |   |  |  |  |
| 11)☐ The oath or declaration is objected to by the                                                                                                                                                                                                                                                                                                                                                                                                                                   | e Examiner. Note the attached Offi                                                                                     | ce Action or form PTO-152.                                                              |   |  |  |  |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                        |                                                                                         |   |  |  |  |
| 12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:                                                                                                                                                                                                                                                                                                                                                                                                           | reign priority under 35 U.S.C. § 119                                                                                   | (a)-(d) or (f).                                                                         |   |  |  |  |
| <ol> <li>Certified copies of the priority docur</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                           | ments have been received.                                                                                              |                                                                                         |   |  |  |  |
| <ol><li>Certified copies of the priority docur</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                             | 2. Certified copies of the priority documents have been received in Application No                                     |                                                                                         |   |  |  |  |
| <ol><li>Copies of the certified copies of the</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                              | priority documents have been rece                                                                                      | ived in this National Stage                                                             |   |  |  |  |
| application from the International Bu                                                                                                                                                                                                                                                                                                                                                                                                                                                | ıreau (PCT Rule 17.2(a)).                                                                                              |                                                                                         |   |  |  |  |
| * See the attached detailed Office action for a                                                                                                                                                                                                                                                                                                                                                                                                                                      | a list of the certified copies not recei                                                                               | ived.                                                                                   |   |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                        |                                                                                         |   |  |  |  |
| Attachmont/c\                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                        |                                                                                         |   |  |  |  |
| Attachment(s)  1)  Notice of References Cited (PTO-892)                                                                                                                                                                                                                                                                                                                                                                                                                              | 4) 🔲 Interview Summa                                                                                                   | PTO-413)                                                                                |   |  |  |  |
| <ul> <li>7) Notice of Relefences Cited (PTO-092)</li> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-94)</li> </ul>                                                                                                                                                                                                                                                                                                                                                      | 3) Paper No(s)/Mail                                                                                                    |                                                                                         |   |  |  |  |
| 3) X Information Disclosure Statement(s) (PTO/SB/08)                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5) D Notice of Informa                                                                                                 | al Patent Application                                                                   |   |  |  |  |
| Paper No(s)/Mail Date <u>3/16/06</u> .                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6) Other:                                                                                                              |                                                                                         |   |  |  |  |

#### **DETAILED ACTION**

This Office action is responsive to communication received 06/26/2006 – Election.

Claims 1-18 remain pending.

#### Election/Restrictions

Claim 18 has been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 06/26/2006.

Following is an action on the MERITS:

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, 5 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Erickson ('129). As to claim 1, see Figures 9 and 10 showing first body (80) comprising a crown and hosel section, which forms the claimed minor body. Second body (85) comprises a sole, striking plate and peripheral ribbon area, which forms the claimed major body. As to claim 3, Figure 9 shows how a portion of the hosel section extends downward from the interior surface of the crown surface. As to claim 4, note

how Figure 10 shows how a portion of the hosel extends upwardly from the exterior of the crown portion. As to claim 5, note column 8, lines 18-37, wherein the thickness of the crown portion is disclosed and includes a dimension within the claimed range. As to claim 9, see column 12, lines 57 and 58, wherein the volume is disclosed as being between 30 and 500 cubic centimeters.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 6, 7, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson ('129) in view of Murphy ('847). Erickson differs from the claimed invention in that Erickson does not specify that the major body comprise metallic material while the minor body comprise non-metallic material. It is noted, however, that Erickson does discuss the use of either metallic or non-metallic materials for the club head. Murphy shows it to be old in the art to fabricate the upper crown portion of a hollow wood-type club head from composite material while making the lower sole section from a material having a higher specific gravity than the material of the crown, the reason being to help lower the center of gravity and desirably affect the weight distribution of the head. See col. 1, lines 53-65 in Murphy. In view of the patent to Murphy, it would have been obvious to modify the device in the cited art reference to Erickson by taking advantage of lighter composite materials for the crown section and

Application/Control Number: 10/711,112

Art Unit: 3711

heavier metallic materials for the sole portion, the motivation being to create a more desirable weight distribution.

Claims 8, 15, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson ('129). As to claims 8 and 15, although Erickson does not detail the exact mass dimensions for the minor and major bodies defined above, Erickson does provide some particular mass dimensions for the various parts of the head. It would appear that the total weight of the Erickson device would fall within the range of the claimed mass, considering the mass of both the claimed minor and major bodies combined. In other words, Erickson obviates the total claimed mass of the head. It would appear that the claimed mass limitations are not critical. Rather, the claimed dimensions are selected based upon the overall weight distribution desired and further based upon the particular materials selected for the various club head parts. The skilled artisan would have found it obvious to tailor the weight of the head, given the suggestions in Erickson that the weight of the head is variable. As to claims 16 and 17, note the argument for claims 8 and 15 and additionally note the language in col. 10, lines 53-57 and col. 12, lines 5-14, wherein the Erickson patent obviates the use of a coefficient of restitution within the claimed range as well as a moment of inertia about the Izz axis. These parameters appear to be well known in the art for wood-type club heads that utilize metallic and composite materials in order to provide proper weight distribution.

Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson ('129) in view of Zeider ('224) and Elmer ('660). Although Erickson lacks a

Art Unit: 3711

suggestion of plural minor bodies, it is clear that if a clubmaker had desired to fabricate a set of clubs, then the teachings of Zeider and Elmer would have obviated the inclusion of plural bodies in which the lie and loft of the club head may be changed. Here, Zeider teaches that the hosel orientation may be changed to alter the lie and loft of the head; thereby suggesting the use of a plurality of club heads, each having a diverse lie and loft angle. Elmer further obviates the notion of plural club head bodies by suggesting that club heads may comprise first and second body elements that are removably attached to one another to help customize a club head according to a golfer's preference. See col. 5, lines 38-65 in Elmer.

## Claim Objections

Claims 6, 7, 8, 13, 14 and 15 are objected to for the following informalities:

Claims 13, 14 and 15 appear to be duplicates of claims 6, 7 and 8, respectively.

Appropriate correction is required.

## Further references of interest

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Figures 2 and 3 in Motomiya. Note Figures 4 and 5 in Mader. Observe Figures 2 and 4 in Barach. See Figure 1 in Imamoto. Mori and Hocknell shows hollow club heads, of interest. See Figure 29 in Kusumoto. Note Figures 4 and 5 in Deshmukh. Chen ('501) and Chen ('086) and Helmstetter show club heads having plural shell pieces. Rice, McCabe and Chen ('896) show hosel arrangements, of interest. See Figure 4 in Dill. Minabe, Allen, Kubica and Wood

Application/Control Number: 10/711,112

**Art Unit: 3711** 

provide mechanisms for varying the lie of the hosel connection. Tsuchiya provides a hollow shell structure, of interest.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 571-272-4413. The examiner can normally be reached on Monday through Friday (6:30AM - 3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene L. Kim can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sebastiano Passaniti Primary Examiner

Page 6

S.Passaniti/sp September 16, 2006